Ground Water Classifications & Designated Uses Workgroup Quick Reference Guide

Updated May 11, 2017

I. <u>General Information</u>

Stakeholder Workgroup Meeting Schedule:

http://www.nj.gov/dep/workgroups/gwqs.html

Ground Water Quality Standards (GWQS) rules at N.J.A.C 7:9C:

- Unofficial copy of the current rule: http://www.nj.gov/dep/rules/rules/njac7 9c.pdf
- Instructions for getting an official copy of the rule: http://www.state.nj.us/dep/legal/get_rule.htm

II. Ground Water Classification System - N.J.A.C. 7:9C-1.5

Class I - Ground Water of Special Ecological Significance

- **Designated Uses**: Maintenance of special ecological resources and potable, agricultural and industrial water supplies (secondary use).
- Class I-A:
 - Watersheds of FW1 surface waters
 - The Natural Areas as designated by the Department pursuant to N.J.A.C. 7:5A-1.13
- Class I-PL Pinelands
 - o as designated by the Pinelands Protection Act, N.J.S.A. 13:18A-1; except Class I-A
 - Class I-PL (Pinelands Protection Area)
 - "restoration, maintenance and preservation of ground water quality in its natural state"
 - Class I-PL (Pinelands Preservation Area)
 - "protection and maintenance of the essential characteristics of Pinelands ground water quality"

Class II – Ground Water for Potable Supplies

- **Designated Uses:** Potable water supplies.
- Class II-A: Used as potable water supplies with conventional treatment at current water quality; Class II-A secondary designated uses include agricultural water and industrial water.
- Class II-B: Regional exceedance of GWQS due to historical discharge; generally may
 include any reasonable use (other than potable use); Used as potable water supplies
 after enhancement or restoration of regional water quality

Class III – Ground Water for Uses Other than Potable Supplies

- **Designated Uses**: Not suitable for potable supplies due to natural hydrogeologic characteristics or natural water quality.
- Class III-A: Aquitards, Release or transmittal of adjacent ground or surface waters
- **Class III-B**: Saltwater Intrusion, Any reasonable use at existing water quality, other than potable water.

III. Key Definitions in N.J.A.C. 7:9C

- Aquitard means a hydrogeologic confining unit(s) that exhibits limited permeability, bounding one or more aquifers, that does not readily yield water to wells or springs, but may serve as a storage unit for ground water and may release this water to adjacent ground water units or surface waters. Such confining units are further defined and listed in N.J.A.C. 7:9C1.5(f)1 or may be established through reclassification under N.J.A.C. 7:9C-1.10.
- **Background water quality** means the concentration of constituents in ground water which is determined to exist directly upgradient of a discharge but not influenced by the discharge, or is otherwise representative of such concentration of constituents as determined using methods and analyses consistent with the requirements of N.J.A.C. 7:14A-10.11(g).
- Classification area means the geographic extent (lateral and vertical) of a geologic formation(s) or unit(s) wherein ground water is classified for designated uses, as described in N.J.A.C. 7:9C-1.5.
- Classification exception area means an area within which one or more constituent standards and designated uses are suspended in accordance with N.J.A.C. 7:9C-1.6.
- Conventional water supply treatment means the chemical and physical treatment of ground
 water supplies for microbiological contaminants and undesirable naturally occurring substances
 resulting in treated water that meets all the primary and secondary standards for those
 constituents stipulated by the New Jersey Safe Drinking Water Act regulations (N.J.A.C. 7:1012.1
 et seq.)
- Designated use means a present or potential use of ground water which is to be maintained, restored and enhanced within a ground water classification area, as determined by N.J.A.C. 7:9C-1.5. Designated uses may include any human withdrawal of ground water (for example, for potable, agricultural and industrial water), the discharge of ground water to surface waters of the State which support human use or ecological systems, or the direct support of ecological systems.
- **FW1** waters means those surface fresh waters defined as such in the Surface Water Quality Standards, N.J.A.C. 7:9B and shown on maps maintained by the Department.
- Natural Area means an area of land or water, designated by the Department under N.J.A.C. 7:5A-1.13 and shown on maps maintained by the Office of Natural Lands Management, Division

of Parks and Forestry, of the Department, which is owned in fee simple or in which a conservation restriction is held by the Department.

- Natural quality means the concentration or level of constituents which occurs in ground water of a hydrologic unit without the influence of human activity, other than the effects of regional precipitation of air pollutants (for example, acid precipitation). The natural quality for SOCs is established as zero (0.0) except where the SOCs are the result of air transport from outside the State, enter the State from ground water transport of pollutants having their origins in other states, or are created entirely by natural processes. Where natural quality for other constituents is not ascertainable from generally acceptable scientific studies, the lowest concentrations known to exist within the same or a similar hydrologic unit and setting (that is, depth) within the classification area shall be used to represent the natural quality, provided, however, that for pH, corrosivity and hardness, the most representative concentration shall be used.
- Natural concentration or regional concentrations Terms are used but not defined in current rules at N.J.A.C. 7:9C-1.5(f)3.